**EXHIBIT B**

**(VERSION WITH MARKINGS TO INDICATE CHANGES MADE)**

**AMENDMENTS TO THE CLAIMS**

*Please amend the claims as follows, specifically canceling without prejudice claims 1-14 and adding claims 15-55:*

I claim:

[1. **HYPERBALOID** three dimensional free standing static structures consisting of four or more discontinuous compression members or struts arranged to form elements of the surface of a hyperboloid of revolution of one sheet and with tension members or guys arranged in a circumferential, a radial or an internal configuration connecting the strut ends of each "end-plane" and in combination with the vertical guys in an internal configuration or on the surface of a separate hyperboloid of revolution of one sheet.

2. **HYPERBOLOID** structures combined with other complete or partial structures as in claims 1,3,4,6,7,9 and 11 or combined with other traditional structures in a nested (overlapping) or adjacent configuration wherein the struts or guys may or may not intersect and common elements may or may not be eliminated from the structure for economy reasons.

3. **HYPERBOLOID** three dimensional free standing static structures consisting of three discontinuous compression members or struts arranged to form elements of the surface of a hyperboloid of revolution of one sheet and with tension members or guys arranged in a circumferential, a radial or an internal configuration connecting the strut

ends of each "end-plane" and in combination with the vertical guys in an internal configuration or on the surface of a separate hyperboloid of revolution of one sheet.

4. **PLANAR** three dimensional free standing static structures consisting of three and six compression members or struts arranged to form elements of the surfaces of three intersecting planes which may or may not be orthogonal and where the struts in each plane may or may not be parallel and with tension members or guys arranged in a radial, a linear or an internal configuration connecting the strut ends defining the polygonal faces of these structures.

5. **PLANAR** structures combined with other complete or partial structures as in claims 1,3,4,6,7,9 and 11 or combined with traditional structures in a nested (overlapping) or adjacent configuration wherein the struts or guys may or may not intersect and common elements may or may not be eliminated from the structure for economy reasons.

6. **PLANAR** three dimensional free standing static structures consisting of four, five and seven or more compression members or struts arranged to form elements of the surface of a minimum of three intersecting planes which may or may not be orthogonal and where the struts in each plane may or may not be parallel and may or may not intersect each other at an internal or a peripheral point and with tension members or guys arranged in a circumferential, a radial, a linear or an internal configuration connecting the strut ends defining the polygonal faces of these structures.

7. **HY-PAR** three dimensional free standing static structures consisting of four or more discontinuous compression members or struts arranged to form a minimum of

two hyperbolic paraboloid surfaces which may or may not be orthogonal and with a minimum of two struts in each surface with tension members or guys arranged in a circumferential, a radial, a linear or an internal configuration connecting the strut ends defining the "end-planes" and with linear guys between ends of struts not on the edges of the hyperbolic paraboloid surfaces.

8. **HY-PAR** structures combined with other complete or partial structures as in claims 1,3,4,6,7,9 and 11 or combined with traditional structures in a nested (overlapping) or adjacent configuration wherein the struts or guys may or may not intersect and common elements may or may not be eliminated from the structure for economy reasons.

9. **RADIAL** three dimensional free standing static structures consisting of four or more compression members or struts arranged to form elements radiating from an internal central point which is not necessarily the exact center point and with tension members or guys arranged in a circumferential, a linear, a radial or an internal configuration connecting the outer strut ends defining the polygonal faces of these structure.

9. **RADIAL** structures combined with other complete or partial structures as in claims 1,3,4,6,7,9 and 11 or combined with traditional structures in a nested (overlapping) or adjacent configuration wherein the struts or guys may or may not intersect and common elements may or may not be eliminated from the structure for economy reasons.

11. **POLYGONAL** three dimensional free standing static structures consisting of four or more compression members or struts arranged in a generally radial manner with the outer ends of these struts connected by guys that are in a circumferential, a radial, a linear or an inward configuration such that an inward force is applied to the struts and with the inner strut ends connected by guys that are in a circumferential, a radial, a linear or an inner configuration such that an outward force is applied to the struts balancing the aforementioned inward force and resulting in structural integrity of these structures.

12. **POLYGONAL** structures combined with other complete or partial structures as in claims 1,3,4,6,7,9 and 11 or combined with traditional structures in a nested (overlapping) or adjacent configuration wherein the struts or guys may or may not intersect and common elements may or may not be eliminated from the structure for economy reasons.

13. Three dimensional free standing static structures as in claims 1 through 12 that are collapsible by means of disconnecting guys from struts or by means of elongating selected guys or shortening selected struts.

14. Three dimensional free standing structures as in claims 1 through 12 that utilize various amounts of pre-stress to achieve design goals.]

15. A three-dimensional structure comprising:

at least four compression members situated on the surface of a first hyperboloid of revolution of one sheet having a mid-plane that is perpendicular to the conjugate axis of said first hyperboloid;

wherein each said at least four compression members includes:

- a first portion located on the surface of said first hyperboloid on one side of the mid-plane of said first hyperboloid and

- a second portion located on the surface of said first hyperboloid on the other side of the mid-plane of said first hyperboloid;

a first set of at least four tension members that connect said first compression member portions with one another;

a second set of at least four tension members that connect said second compression member portions with one another; and

a third set of at least four tension members that each connects at least one of said first compression member portions with at least one of said second compression member portions of a different compression member.

16. A three-dimensional structure as described in claim 15 wherein said third set of at least four tension members is situated on the surface of a second hyperboloid of revolution of one sheet.

17. A three-dimensional structure as described in claim 15 wherein at least three tension members are arranged in a radial configuration.

18. A three-dimensional structure as described in claim 15 wherein at least one tension members are arranged in a circumferential configuration.

19. A three-dimensional structure as described in claim 15 wherein at least one tension member is arranged in an internal configuration.

20. A three-dimensional structure comprising:

at least three compression members situated on the surface of a first hyperboloid of revolution of one sheet having a mid-plane that is perpendicular to the conjugate axis of said first hyperboloid, wherein each said at least three compression members includes:

- a first portion located on the surface of said first hyperboloid on one side of the mid-plane of said first hyperboloid; and

- a second portion located on the surface of said first hyperboloid on the other, second side of the mid-plane of said first hyperboloid;

a first set of at least three tension members that connect said first compression member portions with one another;

a second set of at least three tension members that connect said second compression member portions with one another; and

a third set of at least three tension members that each connects at least one of said first compression member portions with at least one of said second compression member portions of a different compression member,

wherein at least three tension members are configured in a radial configuration.

21. A three-dimensional structure as described in claim 20 wherein said at least three tension members configured in a radial configuration are of said first set of at least three tension members.

22. A three-dimensional structure as described in claim 20 wherein said at least three tension members configured in a radial configuration are of said second set of at least three tension members.

23. A three-dimensional structure as described in claim 20 wherein said third set of at least three tension members is situated on the surface of a second hyperboloid of revolution of one sheet.

24. A three-dimensional structure comprising:

at least three compression members situated on the surface of a first hyperboloid of revolution of one sheet having a mid-plane that is perpendicular to the conjugate axis of said first hyperboloid, wherein each said at least three compression members includes:

- a first portion located on the surface of said first hyperboloid on one side of the mid-plane of said first hyperboloid; and

- a second portion located on the surface of said first hyperboloid on the other, second side of the mid-plane of said first hyperboloid;

a first set of at least three tension members that connects said first compression member portions with one another;

a second set of at least three tension members that connects said second compression member portions with one another; and

a third set of at least three tension members that each connects at least one of said first compression member portions with at least one of said second compression member portions of a different compression member,

wherein at least one tension member is configured in an internal configuration.

25. A three-dimensional structure as described in claim 24 wherein said at least one tension members configured in an internal configuration is of said first set of at least three tension members.

26. A three-dimensional structure as described in claim 24 wherein said at least one tension members configured in an internal configuration is of said second set of at least three tension members.

27. A three-dimensional structure as described in claim 24 wherein said at least one tension members configured in an internal configuration is of said first third of at least three tension members.

28. A three-dimensional structure as described in claim 24 wherein said third set of at least three tension members is situated on the surface of a second hyperboloid of revolution of one sheet.

29. A three-dimensional structure comprising:

at least three compression members that each lie on the surface of one of at least three different planes that intersect one another; and

a set of at least six tension members that connects each of said at least three compression members with at least one other compression member of said at least three compression members,

wherein at least three tension members of said set of at least six tension members are arranged in a radial configuration.

30. A three-dimensional structure comprising:

at least three compression members that each lie on the surface of one of at least three different planes that intersect one another; and

a set of at least six tension members that connects each of said at least three compression members with at least one other compression member of said at least three compression members,

wherein at least one tension member of said set of at least six tension members is arranged in an internal configuration.

31. A three-dimensional structure comprising:

at least four compression members that lie on the surfaces of two different planes that intersect one another; and

a set of at least six tension members that connects each of said at least four compression members with at least one other compression member of said at least four compression members.

32. A three-dimensional structure as described in claim 31 wherein at least one tension member is arranged in an internal configuration.

33. A three-dimensional structure as described in claim 31 wherein at least three tension members are arranged in a radial configuration.

34. A three-dimensional structure as described in claim 31 wherein at least one tension member is arranged in a circumferential configuration.

35. A three-dimensional structure comprising:

a first set of at least two compression members situated on the surface of a first hyperbolic paraboloid;

a second set of at least two compression members situated on the surface of a second hyperbolic paraboloid; and

a set of at least twelve tension members which connect said compression members with one another,

wherein said second hyperbolic paraboloid surface intersects said first hyperbolic paraboloid surface.

36. A three-dimensional structure as described in claim 35 wherein at least one of said at least twelve tension members is arranged in an internal configuration.

37. A three-dimensional structure as described in claim 35 wherein at least three of said set of at least twelve tension members are arranged in a radial configuration.

38. A three-dimensional structure as described in claim 35 wherein at least one of said set of at least twelve tension members is arranged in a circumferential configuration.

39. A three-dimensional structure comprising:

at least four compression members having ends that contact at a common spatial point from which each of said at least four compression members radiates outwardly; and

a set of at least six tension members that connect said at least four compression members with one another.

40. A three-dimensional structure as described in claim 39 wherein at least three tension members of said set of at least six tension members are arranged in a radial configuration.

41. A three-dimensional structure as described in claim 39 wherein at least one tension member of said set of at least six tension members are arranged in a circumferential configuration.

42. A three-dimensional structure as described in claim 39 wherein at least one tension member of said set of at least six tension members are arranged in an internal configuration.

43. A three-dimensional structure comprising:

at least four compression members;

an outer set of at least six tension members that connects said at least four compression members with one another at outer tension member attachments; and

an inner set of at least four tension members that connects said at least four compression members with one another at inner tension member attachments,

wherein said inner tension member attachments and said outer tension member attachments are disposed on said at least four compression members,

wherein said outer tension member attachments define an outer enclosing surface that has only polygonal faces, and

wherein said inner tension member attachments are disposed within said outer enclosing surface.

44. A three-dimensional structure as described in claim 43 wherein at least one tension member is arranged in an internal configuration.

45. A three-dimensional structure as described in claim 43 wherein at least three tension members are arranged in a radial configuration

46. A three-dimensional structure as described in claim 43 wherein at least three tension members are arranged in a circumferential configuration.

47. A three-dimensional structure comprising:

at least three compression members; and

at least six tension members that connect said at least three compression members with one another,

wherein at least three of said at least six tension members are arranged in a radial configuration.

48. A three-dimensional structure comprising:

at least three compression members; and

a set of at least six tension members that connect said at least three compression members with one another, and

wherein at least one of said tension members is arranged in an internal configuration.

49. A three-dimensional structure comprising:

at least three compression members,

wherein at least two of said at least three compression members are situated on the surface of a first hyperboloid of revolution of one sheet;

wherein at least one other compression member of said at least three compression members is situated on the surface of at least a second hyperboloid of revolution of one sheet,

wherein each said hyperboloid of revolution of one sheet has a mid-plane that is perpendicular to the conjugate axis of the hyperboloid, and

wherein each said at least three compression members includes:

- a first portion situated on one side of the mid-plane of the hyperboloid upon which it is situated;

- a second portion situated on the other side of the mid-plane of the hyperboloid upon which it is situated;

a first set of at least three tension members that connect said first compression member portions with one another;

a second set of at least three tension members that connect said second compression member portions with one another; and

a third set of at least three tension members that each connect at least one of said first compression member portions with at least one of said second compression member portions of a different compression member.

50. A three-dimensional structure as described in claim 49 wherein at least one of said tension members is arranged in an internal configuration.

51. A three-dimensional structure as described in claim 49 wherein at least three of said tension members are arranged in a radial configuration.

52. A three-dimensional structure as described in claim 49 wherein at least one of said tension members are arranged in a circumferential configuration.

53. A three-dimensional structure as described in claims 15, 20, 24, 29, 30, 31, 35, 39, 43, 47, 48, or 49 wherein each of said compression members is straight.

54. A three-dimensional structure as described in claims 15, 20, 24, 29, 30, 31, 35, 39, 43, 47, 48 or 49 wherein each said tension members attaches ends of at least two compression members.

55. Compression members and tension members that are configurable to form the three-dimensional structure as described in 15, 20, 24, 29, 30, 31, 35, 39, 43, 47, 48 or 49.